SEQUENCE LISTING

(1) GENERAL INFORMATION:

    (i) APPLICANT: Perkin-Elmer Corporation,

                Applied Biosystems Division

    (ii) TITLE OF INVENTION: HYBRIDIZATION ASSAY USING SELF-QUENCHING FLUORESCENCE PROBE

    (iii) NUMBER OF SEQUENCES: 14

    (iv) CORRESPONDENCE ADDRESS:

        (A) ADDRESSEE: David J. Weitz,

                Haynes & Davis

        (B) STREET: 2180 Sand Hill Road, Suite 310

        (C) CITY: Menlo Park

        (D) STATE: California

        (E) COUNTRY: USA

        (F) ZIP: 94025-6935

    (v) COMPUTER READABLE FORM:

        (A) MEDIUM TYPE: 3.5 inch diskette

        (B) COMPUTER: IBM compatible

        (C) OPERATING SYSTEM: Microsoft Windows 3.1/DOS 5.0

        (D) SOFTWARE: Wordperfect for windows 6.0,

                ASCII (DOS) TEXT format

    (vi) CURRENT APPLICATION DATA:

        (A) APPLICATION NUMBER:

        (B) FILING DATE:

        (C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

    (A) APPLICATION NUMBER: 08/340,558

    (B) FILING DATE: 16-NOV-94

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(viii) ATTORNEY/AGENT INFORMATION:

    (A) NAME: David J. Weitz

    (B) REGISTRATION NUMBER: 38,362

    (C) REFERENCE/DOCKET NUMBER: PELM4264CIP2

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(ix) TELECOMMUNICATION INFORMATION:

    (A) TELEPHONE: (415) 233-0188

    (B) TELEFAX: (415) 233-1129

(2) INFORMATION FOR SEQ ID NO: 1:

15   (i) SEQUENCE CHARACTERISTICS:

    (A) LENGTH: 24 nucleotides

    (B) TYPE: nucleic acid

    (C) STRANDEDNESS: single

    (D) TOPOLOGY: linear

20   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

ACCCACAGGA ACTGATCACC ACTC   24

(2) INFORMATION FOR SEQ ID NO: 2:

    (i) SEQUENCE CHARACTERISTICS:

25   (A) LENGTH: 26 nucleotides

    (B) TYPE: nucleic acid

    (C) STRANDEDNESS: single

    (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

- 40 -

41

ATGTCGCGTT CCGGCTGACG TTCTGC   26

(2) INFORMATION FOR SEQ ID NO: 3:

    (i) SEQUENCE CHARACTERISTICS:

        (A) LENGTH: 27 nucleotides

        (B) TYPE: nucleic acid

        (C) STRANDEDNESS: single

        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

TCGCATTACT GATCGTTGCC AACCAGT   27

(2) INFORMATION FOR SEQ ID NO: 4

    (i) SEQUENCE CHARACTERISTICS:

        (A) LENGTH: 31 nucleotides

        (B) TYPE: nucleic acid

        (C) STRANDEDNESS: single

        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4

GTACTGGTTG GCAACGATCA GTAATGCGAT G   31

(2) INFORMATION FOR SEQ ID NO: 5

    (i) SEQUENCE CHARACTERISTICS:

        (A) LENGTH: 28 nucleotides

        (B) TYPE: nucleic acid

        (C) STRANDEDNESS: single

        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5

CGGATTTGCT GGTATCTATG ACAAGGAT   28

42

(2) INFORMATION FOR SEQ ID NO: 6

    (i) SEQUENCE CHARACTERISTICS:

        (A) LENGTH: 31 nucleotides

        (B) TYPE: nucleic acid

        (C) STRANDEDNESS: single

        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6

TTCATCCTTG TCATAGATAC CAGCAAATCC G   31

(2) INFORMATION FOR SEQ ID NO: 7

    (i) SEQUENCE CHARACTERISTICS:

        (A) LENGTH: 25 nucleotides

        (B) TYPE: nucleic acid

        (C) STRANDEDNESS: single

        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7

TCACCCACAC TGTGCCCATC TACGA   25

(2) INFORMATION FOR SEQ ID NO: 8

    (i) SEQUENCE CHARACTERISTICS:

        (A) LENGTH: 25 nucleotides

        (B) TYPE: nucleic acid

        (C) STRANDEDNESS: single

        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8

CAGCGGAACC GCTCATTGCC AATGG   25

(2) INFORMATION FOR SEQ ID NO: 9

    (i) SEQUENCE CHARACTERISTICS:

43

(A) LENGTH: 26 nucleotides

                    (B) TYPE: nucleic acid

                    (C) STRANDEDNESS: single

                    (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9

ATGCCCTCCC CCATGCCATC CTGCGT   26

     (2) INFORMATION FOR SEQ ID NO: 10

          (i) SEQUENCE CHARACTERISTICS:

                    (A) LENGTH: 30 nucleotides

                    (B)   TYPE: nucleic acid

                    (C) STRANDEDNESS: single

                    (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10

AGACGCAGGA   TGGCATGGGG GAGGGCATAC   30

     (2) INFORMATION FOR SEQ ID NO: 11

          (i) SEQUENCE CHARACTERISTICS:

                    (A) LENGTH: 24 nucleotides

                    (B) TYPE: nucleic acid

                    (C) STRANDEDNESS: single

                    (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11

CGCCCTGGAC TTCGAGCAAG AGAT   24

     (2) INFORMATION FOR SEQ ID NO: 12

          (i) SEQUENCE CHARACTERISTICS:

                    (A) LENGTH: 23 nucleotides

                    (B) TYPE: nucleic acid

- 43 -

44

(C) STRANDEDNESS: single

          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12

CCATCTCTTG CTCGAAGTCC AGGGCGAC   28

5

(2) INFORMATION FOR SEQ ID NO: 13

      (i) SEQUENCE CHARACTERISTICS:

          (A) LENGTH: nucleotides

          (B) TYPE: nucleic acid

10   (C) STRANDEDNESS: single

          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13

CAAGCTTCCC GTTCTCAGCC T   21

15 (2) INFORMATION FOR SEQ ID NO: 14

      (i) SEQUENCE CHARACTERISTICS:

          (A) LENGTH: 30 nucleotides

          (B) TYPE: nucleic acid

          (C) STRANDEDNESS: single

20   (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14

ACCGTCAAGG CTGAGAACGG GAAGCTTGTC   30

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SEQUENCE LISTING
(1) GENERAL INFORMATION:
    (i) APPLICANT: Perkin-Elmer Corporation,
                 Applied Biosystems Division
    (ii) TITLE OF INVENTION: HYBRIDIZATION ASSAY USING SELF
QUENCHING
FLUORESCENCE PROBE
    (iii) NUMBER OF SEQUENCES: 14
    (iv) CORRESPONDENCE ADDRESS:
        (A) ADDRESSEE: David J. Weitz,
                 Haynes & Davis
        (B) STREET: 2180 Sand Hill Road, Suite 310
        (C) CITY: Menlo Park
        (D) STATE: California
        (E) COUNTRY: USA
        (F) ZIP: 94025-6935

    (v) COMPUTER READABLE FORM:
        (A) MEDIUM TYPE: 3.5 inch diskette
        (B) COMPUTER: IBM compatible
        (C) OPERATING SYSTEM: Microsoft Windows 3.1/DOS 5.0
        (D) SOFTWARE: Wordperfect for windows 6.0,
                 ASCII (DOS) TEXT format

    (vi) CURRENT APPLICATION DATA:
        (A) APPLICATION NUMBER:
        (B) FILING DATE:
        (C) CLASSIFICATION:

    (vii) PRIOR APPLICATION DATA:
        (A) APPLICATION NUMBER: 08/340,558
        (B) FILING DATE: 16-NOV-94

    (viii) ATTORNEY/AGENT INFORMATION:
        (A) NAME: David J. Weitz
        (B) REGISTRATION NUMBER: 38,362
        (C) REFERENCE/DOCKET NUMBER: PELM4264CIP2

    (ix) TELECOMMUNICATION INFORMATION:
        (A) TELEPHONE: (415) 233-0188
        (B) TELEFAX: (415) 233-1129

(2) INFORMATION FOR SEQ ID NO: 1:
    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 24 nucleotides

```
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS:  single
          (D) TOPOLOGY:  linear
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
ACCCACAGGA  ACTGATCACC  ACTC                                        24


(2) INFORMATION FOR SEQ ID NO: 2:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 26 nucleotides
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS:  single
          (D) TOPOLOGY:  linear
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
ATGTCGCGTT  CCGGCTGACG  TTCTGC                                      26


(2) INFORMATION FOR SEQ ID NO: 3:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 27 nucleotides
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS:  single
          (D) TOPOLOGY:  linear


     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
TCGCATTACT  GATCGTTGCC  AACCAGT                                     27


(2) INFORMATION FOR SEQ ID NO:  4
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 31 nucleotides
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS:  single
          (D) TOPOLOGY:  linear
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:  4
GTACTGGTTG  GCAACGATCA  GTAATGCGAT  G                               31


(2) INFORMATION FOR SEQ ID NO:  5
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 28 nucleotides
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS:  single
          (D) TOPOLOGY:  linear
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:  5
CGGATTTGCT  GGTATCTATG  ACAAGGAT                                    28


(2) INFORMATION FOR SEQ ID NO:  6
     (i) SEQUENCE CHARACTERISTICS:
```

```
            (A) LENGTH: 31 nucleotides
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS:  single
            (D) TOPOLOGY:  linear
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO:  6
TTCATCCTTG  TCATAGATAC  CAGCAAATCC  G                              31


(2) INFORMATION FOR SEQ ID NO:  7
       (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 25  nucleotides
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS:  single
            (D) TOPOLOGY:  linear
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO:  7
TCACCCACAC  TGTGCCCATC  TACGA                                     25


(2) INFORMATION FOR SEQ ID NO:  8
       (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 25 nucleotides
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS:  single
            (D) TOPOLOGY: · linear
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO:  8
CAGCGGAACC  GCTCATTGCC  AATGG                                     25


(2) INFORMATION FOR SEQ ID NO:  9
       (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 26 nucleotides
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS:  single
            (D) TOPOLOGY:  linear
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: · 9
ATGCCCTCCC  CCATGCCATC  CTGCGT                                    26


(2) INFORMATION FOR SEQ ID NO:  10
       (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 30 nucleotides
            (B)  TYPE: nucleic acid
            (C) STRANDEDNESS:  single
            (D) TOPOLOGY:  linear
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO:  10
AGACGCAGGA  TGGCATGGGG  GAGGGCATAC                                30


(2) INFORMATION FOR SEQ ID NO:  11
       (i) SEQUENCE CHARACTERISTICS:
```

```
            (A)  LENGTH: 24 nucleotides
            (B)  TYPE: nucleic acid
            (C)  STRANDEDNESS:  single
            (D)  TOPOLOGY:  linear
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO:  11
CGCCCTGGAC  TTCGAGCAAG  AGAT                                        24


(2) INFORMATION FOR SEQ ID NO:  12
       (i) SEQUENCE CHARACTERISTICS:
            (A)  LENGTH: 28 nucleotides
            (B)  TYPE: nucleic acid
            (C)  STRANDEDNESS:  single
            (D)  TOPOLOGY:  linear
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO:  12
CCATCTCTTG  CTCGAAGTCC  AGGGCGAC                                    28


(2) INFORMATION FOR SEQ ID NO:  13
       (i) SEQUENCE CHARACTERISTICS:
            (A)  LENGTH:  nucleotides
            (B)  TYPE: nucleic acid
            (C)  STRANDEDNESS:  single
            (D)  TOPOLOGY:  linear
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO:  13
CAAGCTTCCC  GTTCTCAGCC  T                                           21


(2) INFORMATION FOR SEQ ID NO:  14
       (i) SEQUENCE CHARACTERISTICS:
            (A)  LENGTH: 30 nucleotides
            (B)  TYPE: nucleic acid
            (C)  STRANDEDNESS:  single
            (D)  TOPOLOGY:  linear
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO:  14
ACCGTCAAGG  CTGAGAACGG  GAAGCTTGTC                                  30
```